## Solar Thermal '10: a high-energy event

Solar thermal systems offer an emerging market opportunity for contractors in Wisconsin and across the nation. That was the clear message delivered to approximately 300 attendees at Solar Thermal '10, an industry conference hosted by the Midwest Renewable Energy Association (MREA) on Sept. 30 and Oct. 1 at Frontier Airlines Center in Milwaukee.

"We had very good attendance this year, reflecting the growing interest in solar thermal, especially in Milwaukee, which could become a key manufacturing center for the industry," said Doug Stingle, MREA programs director, in an interview with Wisconsin Perspective.

Keynote speaker Lisa Frantzis, managing director for renewable and distributed energy, Navigant Consulting, presented the findings of the firm's recent study of the history, system types, and supply chain of the solar thermal industry.

"Currently most solar hot water systems are installed in China and Europe," she said. "However, the market in the U.S. continues to grow at about 6% per year and is expected to grow at a higher rate in the future."

She noted that commercial system installations have been increasing in recent years, a trend that is expected to continue in this decade. Overall, the U.S. solar water heater component manufacturing market is valued at about \$400 million annually. "This market is highly fragmented, presenting opportunities for new players," Frantzis added. "Wisconsin, and specifically Milwaukee, have many attractive aspects for the manufacturing of solar thermal components."

Solar Thermal '10 featured 34 exhibitors, including panel manufacturers, component manufacturers, monitoring and control makers, and educational institutions from throughout the nation. The conference also featured 18 breakout sessions featuring industry leaders who presented on many topics, including metering and controls, case studies of commercial installs, solar cooling, and solar air heating.



One of the highlights of Solar Thermal '10 was the Innovators Forum sponsored by the Milwaukee Metro Solar Hot Water Business Council, an organization promoting the city as a manufacturing center.

Stingle said the Innovators Forum brought together some of the brightest minds in the solar thermal industry to brainstorm ideas to solve three questions critical to the industry. Asked what suggestions they had for cost-effective design modifications or technical improvements for solar thermal to be implemented today, the panelists said:

- Package systems
- · Insulation installation
- Pump stations with adaptors to switch between U.S. and metric systems
- · Larger collectors for larger applications

As for what new policies or policy changes, are needed at federal, state, or local level, they responded:

- Consistency in programs
- · Performance-based incentives
- National renewable-energy portfolio standards or feed-in with solar hot water
- · New options, such as a leasing model
- · Solve double-wall heat exchanger issues

Finally, the panelists were asked, how do you market solar thermal so it's appealing to the mainstream end-user? Their responses were:

- · Consistent positive message
- · Industry needs marketing plan
- · Industry members need to agree!
- · Make it easy and simple for consumers